

# **GSD-03 PROCESS FLOW DIAGRAM – INSTRUCTIONS**

The purpose of GSD-03 is to provide a diagram of each process that has the potential to emit air pollutants. This form consists of a checklist for identifying the basic information that is required to be included on each Process Flow diagram. A GSD-03 form and the associated Process Flow diagram are required for all air permit applications submitted to the <a href="Indiana Department of Environmental Management (IDEM)">Indiana Department of Environmental Management (IDEM)</a>, Office of Air Quality (OAQ). For the purposes of this form, the term "source" refers to the plant as a whole and NOT to the individual emissions units. If you do not provide the enough information to adequately describe the process, the application process may be stopped.

NOTE: The Air Quality modeling section has provided an example of a basic process flow diagram (link to plant layout). This is only an example and has not been drawn to scale. You are not limited to this illustration; add any information you feel is necessary to fully describe the process.

If you have any questions, contact the IDEM OAQ Permit Reviewer of the Day (PROD) at (317) 233-0178 or 1-800-451-6027 extension 3-0178 (toll free call within Indiana) or via electronic mail using the <a href="mailto:online\_form">online\_form</a> or a direct email to <a href="mailto:OAMPROD@dem.state.in.us">OAMPROD@dem.state.in.us</a>.

#### SUBMISSION OF CONFIDENTIAL RECORDS

All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claim of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in 326 IAC 17.1-4-1. Failure to follow these requirements exactly, will result in your confidential information becoming a public record, available for public inspection. To ensure that your information remains confidential, refer to the IDEM, OAQ information regarding submittal of confidential business information. For more information on confidentiality for certain types of business information, please review IDEM's Nonrule Policy Document Air-031-NPD regarding Emission Data.

# Part A: Process Flow Diagram

Part A is intended to provide sufficient information to understanding the process. Include the following (*All throughputs should be given in pounds per hour.*):

#### 1. Process Equipment:

Show all equipment used in the process and include emissions unit identification numbers. You will also need to submit the appropriate Process Information (PI) form for each process.

## 2. Raw Material Input:

Identify all raw materials used, and state the raw material input of each in pounds per hour (lbs/hr).

### 3. Process Throughput:

Identify all final and intermediate products, and state the maximum process throughput (maximum capacity) in pounds per hour (lbs/hr) at each step of the process.

#### 4. Additions / Deletions / Modifications

Identify any additional equipment that has been added since the last time the permit was updated. State if any equipment was deleted since the last time the permit was updated. Identify any proposed modifications to the existing process.

#### Part B: Process Operation Schedule

Part B is intended to indicate the actual hours of operation for the process.

#### 5. Process Operation Schedule:

Indicate the actual operation schedule for each process in hours per day (hr/d), days per week (d/wk), and weeks per year (wk/yr). If individual emissions units operate on different schedules, include the actual operation schedule for each emissions unit. If there will be scheduled periods of downtime, please include as much information as is known at the time of application.

NOTE: Indiana Law requires permit emission limits to be based on the <u>potential to emit (PTE)</u> air pollutants as if the process was operating at full capacity 24 hours per day, seven (7) days per week. It is important to provide the actual hours of operation so we can compare the potential to emit with actual estimated emissions. Some

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sources may opt to take a limit on the potential to emit for the entire source, or individual processes, in order to better reflect the actual operating scenario.

### Part C: Emissions Point Information

Part C is intended to provide information about each potential outlet of air pollutant emissions to the atmosphere.

#### 6. Stack / Vent Information:

Identify the location of all process equipment vents and stacks and include stack identification numbers. You will also need to include the stack identification, height, diameter, gas discharge temperature, and gas flow rate for <u>each</u> of these emission points on form GSD-04, Stack/Vent Information.

#### 7. Pollutants Emitted:

Show all pollutants released to the atmosphere during operation of this process.

#### 8. Air Pollution Control Equipment:

Show the location of all air pollution control equipment (CE), indicate what air pollutants will be abated, state the control and capture efficiencies of the CE, and include identification numbers for all CE.

## Part D: Process Flow Diagram

Part D is intended to provide a place for a hand drawn process flow diagram. It is **optional** to use this space to create your process flow diagram.

## Summary of Websites

- 1. Indiana Department of Environmental Management (IDEM): http://www.in.gov/idem/
- 2. Office of Air Quality (OAQ): http://www.in.gov/idem/air/
- 3. Permit Reviewer of the Day (PROD) online form: <a href="http://www.in.gov/idem/air/permits/prodform.html">http://www.in.gov/idem/air/permits/prodform.html</a>
- 4. Article 17.1, Rule 4, Section 1 of the Indiana Administrative Code (326 IAC 17.1-4-1): http://www.in.gov/legislative/iac/T03260/A00171.PDF
- 5. IDEM, OAQ guidance regarding submittal of confidential business information: <a href="http://www.in.gov/idem/air/permits/apps/cbi.pdf">http://www.in.gov/idem/air/permits/apps/cbi.pdf</a>
- 6. IDEM's Nonrule Policy Document regarding Emission Data (Air-031-NPD): http://www.in.gov/idem/air/rules/nrpd/index.html
- 7. Explanation of Potential To Emit: http://www.in.gov/idem/guides/permit/air/airemissions.html#pte

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